



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,829	07/15/2003	Jason A. Trachewsky	BP2481.3	7190
51472	7590	06/20/2008		
GARLICK HARRISON & MARKISON				
P.O. BOX 160727				
AUSTIN, TX 78716-0727				
EXAMINER				
CAL WAYNE HUU				
ART UNIT		PAPER NUMBER		
2617				
MAIL DATE		DELIVERY MODE		
06/20/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/619,829

Applicant(s)

TRACHEWSKY, JASON A.

Examiner

WAYNE CAI

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE-US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed March 18, 2008 have been fully considered but they are not persuasive.

The Applicant argues that each of the independent claims require a single WLAN device comprise a plurality of radios and plurality of baseband processor interfaces instead of a plurality of WLAN device comprise a plurality of radios and plurality of baseband processor interfaces as taught or illustrated in Figure 2 of Monin. The Applicant further argues that Figure 2 fails to teach baseband processor interfaces.

The Examiner respectfully acknowledges that it was the Examiner's mistake to point to Figure 2 for the teachings. The Examiner respectfully invites the Applicant to refer to Figure 5 for the teaching of these claims limitations. Figure 5 clearly illustrates a single WLAN device (i.e., the control unit 28) comprises a plurality of radios 42 (e.g., radio module 1, radio module 2, etc.) and plurality of baseband processor 40 (e.g., baseband module 1, baseband module 2, etc.) Even though Monin does not expressly disclose baseband processor interface as claimed; However, it is inherent to include the "interface", specifically baseband processor interface because the interface is the surface regarded as the common boundary between two components. Since baseband processor or baseband module is connected, communicated with the radio or radio module as illustrated in Figure 5 of Monin, one skilled in the art would unhesitatingly conceptualize that the "interface" must be included. Hence, the rejections of

Art Unit: 2617

independent claim 15 are maintained. Please refer to detailed office action for the rejections of currently amended independent claim 22.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 15, 16, 18-23, 25, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Monin et al. (hereinafter "Monin", US 2002/0197984).

Regarding claim 15, Monin discloses a Wireless Local Area Network (WLAN) device (fig. 5, control unit 28), comprising:

a first baseband processor interface for receiving, processing and generating digital data (fig. 5, baseband module 1 is connected to radio module 1);

a first radio for receiving the digital data and for transmitting RF signals in a first frequency band and for receiving RF signals in the first frequency band and for producing corresponding digital data to the first baseband processor interface (fig. 5, radio module 1);

a second baseband processor interface for receiving, processing and generating digital data (fig. 5, baseband module 2 is connected to radio module 2); and

a second radio for receiving the digital data and for transmitting RF signals in a second frequency band and for receiving RF signals in the second frequency band and for producing corresponding digital data to the second baseband processor interface (fig. 5, radio module 2).

Regarding claims 16 and 23, Monin discloses all limitations recited within claims as described above. Monin also discloses logic for determining a quality indicator, wherein the quality indicator for a selected channel considers a channel power and interference power for the selected channel (paragraphs 0066, 0068).

Regarding claims 18 and 25, Monin discloses all limitations recited within claims as described above. Monin also discloses logic for selecting a communication protocol for operation from a plurality of available communication protocols (paragraph 0071).

Regarding claims 19 and 26, Monin discloses all limitations recited within claims as described above. Monin also discloses logic for selecting at least two frequency bands and communicating over at least one channel in each of the two frequency bands (paragraph 0071, fig. 3).

Regarding claim 20, Monin discloses all limitations recited within claims as described above. It is also inherent to include first and second radio interfaces and first and second baseband processors wherein the first baseband processor communicates with the first baseband processor interface by way of the first radio interface and the second baseband processor communicates with the second baseband processor interface by way of the second radio interface.

Regarding claim 21, Monin discloses all limitations recited within claims as described above. Monin also discloses including first and second radio interfaces wherein the first baseband processor communicates with the first baseband processor interface by way of the first radio interface and with the second baseband processor interface by way of the second radio interface (see fig. 2).

Regarding claim 22, Monin discloses a Wireless Local Area Network (WLAN) device, comprising:

- at least one baseband processor for receiving, processing and generating digital data (fig. 5, baseband module 1);

- a baseband processor for receiving processing and generating digital data (element 34 and 50 and its descriptions);

- a first radio for receiving the digital data and for transmitting RF signals in a first frequency band and for receiving RF signals in the first frequency band and for producing corresponding digital data to the at least baseband processor interface (fig. 5, radio module 1);

- a second radio for receiving the digital data and for transmitting RF signals in a first frequency band and for receiving RF signals in the first frequency band and for producing corresponding digital data to the at least baseband processor interface (fig. 5, radio module 2);

inherently include first and second baseband processor interfaces operably coupled to first and second radios; first and second radio interfaces operably coupled to the at least one base band processor, wherein the first and second radio interfaces are

operably coupled to communicate with the first and second baseband processor interfaces as explained above;

wherein the at least one baseband processor generates digital data for transmission from one of the first radio, the second radio or both; and wherein the at least one baseband processor, the first and second radios, the first and second baseband processor interfaces, first and second radio interface are all a part of a single WLAN device (fig. 5, and its descriptions).

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WAYNE CAI whose telephone number is (571)272-7798. The examiner can normally be reached on Monday-Thursday from 8:00 a.m. to 6:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc M. Nguyen can be reached on (571) 272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Wayne Cai/
Examiner, Art Unit 2617

/Duc Nguyen/
Supervisory Patent Examiner, Art Unit 2617